

Dry Texas. Left: Deterministic precipitation from analogs, August 4-7, 2013. Right: Same as left, except from August 8-15, 2013. White shading = no precipitation forecast, which includes all of South Texas.

Some Like It Dry... ...And If You're One, South Texas Is For You, Aug 1-17 2013

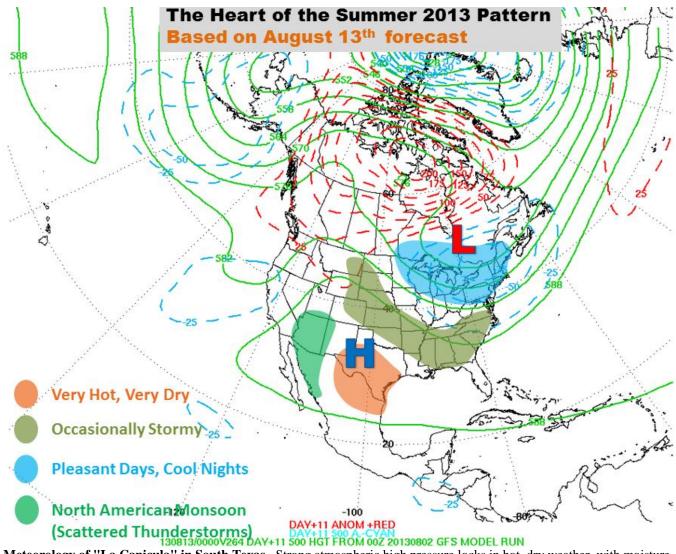
August picks up where the last week of July 2013 left off for the Rio Grande Valley: Blistering heat and abundant sunshine is expected for at least the first half of the month, perhaps carrying on longer. For parents and children looking to get their final summer licks in before school preparation and the start of the fall semester arrives, we've got your medicine. Plenty of perfect to near-perfect beach and pool days if you're able to enjoy the cooling waters.

If you can't be near the cooling influence of the Gulf or a swimming area, and plan to be outdoors for any period of time, heat safety remains the "hot" topic of the next two to three weeks. Daytime temperatures will continue to reach the triple digits most afternoons away from the coast, some 3 to 5 degrees above the already hot mid to upper 90s we typically see during what is the hottest stretch of days in any calendar year.

For student athletes heading to school for pre-season training, be sure to hydrate continuously and take frequent breaks, and most importantly, save strenuous exercise for the early morning or very late afternoon/early evening. For everyone else, check out heat safety tips here. For parents out and about with young children, remember to look before you lock upon leaving your vehicle. Beat the Heat...Check the Backseat!

Why So Hot, Why So Long

We've mentioned "La Canícula" at length on these pages. La Canícula is associated with the mid to late summer period when the constellation Sirius rises with the sun, coinciding with the hottest time of the year. The weather pattern typically features high pressure ridging across the southern Plains and northern Mexico, which suppresses precipitation and allows for plenty of sunshine and the hottest temperatures of any calendar year. In 2013, La Canícula has become more intense than "normal" (top of next page) and, combined with persistent dry soils courtesy of the record drought, allowing daytime temperatures to rise some 3 to 5 degrees above long term averages. The typical summer range of daytime temperatures is about two degrees either side of average, which in late July and early August ranges from 95 in Brownsville to 98/99 in McAllen. Expected afternoon temperatures in Brownsville will continue to be 97/98 and 102-104 in McAllen; these values and long duration of them were last seen in late July/early August of 2011. The current 2013 version of La Canícula is forecast to average somewhere between the 2011 swelter and the benchmark broil of August, 2009.



The Meteorology of "La Canicula" in South Texas. Strong atmospheric high pressure locks in hot, dry weather, with moisture circulating around the periphery. Any moisture from the tropics will either dry out or be held well south of the Rio Grande Valley.

Droughtlook, in Brief

Plenty of heat, sunshine, and the occasional breeze has rapidly wiped out temporary soil improvements seen around July 20th across areas along/east of Highway 77 and along the river in Zapata County. Elsewhere,

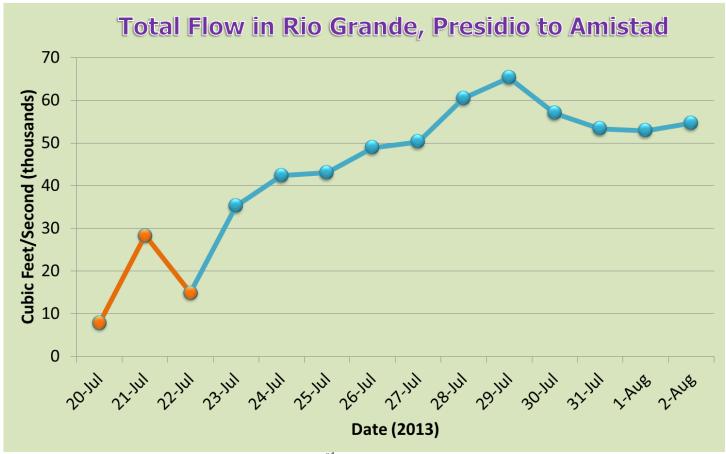
dusty, brown ground continues to be the story. The current forecast suggests Extreme to Exceptional Drought will expand once again across Deep South Texas and the Valley by mid August (right).

Reservoir Hope, if only Temporary

Updated: After <u>locally heavy rainfall</u> <u>dropped up to 20 inches in the Rio</u> <u>Conchos</u>, reservoirs in the region filled above conservation capacity, and the water flowed at significantly higher levels along the Rio Grande from near Presidio to Amistad International Reservoir beginning on July 23rd (top of next page). By August 1st, Amistad had exceeded 40% capacity for the first time since mid April, a rise of more than 3 percent (Texas share)



*Expected by Mid August



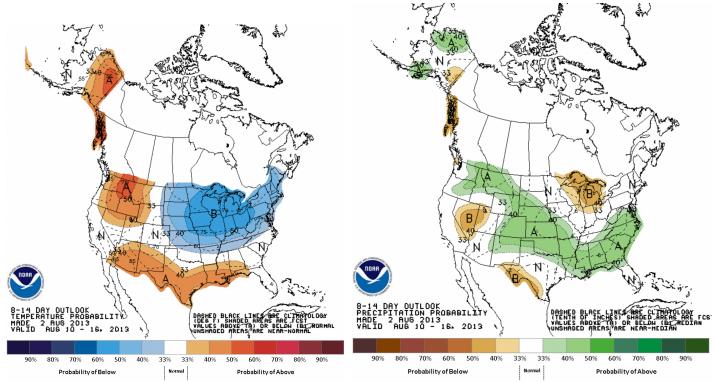
Going with the Flow. Note the rapid increase after July 22nd as overflow from the Rio Conchos reservoirs reached the Rio Grande. Orange line/points indicate flows just prior to the arrival of the releases, which peaked on July 29th but continued above 50,000 cfs into early August. Cautionary note: The values shown above are <u>total releases for six gaging locations</u>. The true flow at any location would be based on an average of the flow down river, which includes these six points but all areas in between. In the above case, average would be somewhere between 5 and 10 thousand cubic feet per second.

since around July 20th. While additional rainfall is not expected in the Rio Conchos or Rio Grande basin south of New Mexico through at least August 15th, additional water is expected to flow from these reservoirs into the Rio Grande for a while longer. On August 2nd, releases from Luis Leon Reservoir and F. I. Madero Reservoir had reached more than 19 thousand cubic feet per second, ensuring additional water flowing into the Rio Grande. Estimated data suggest the Texas share may reach or exceed 45% of conservation at Amistad before the flows level off.

If, and when, water is released from Amistad downstream to Falcon International Reservoir and perhaps into the Rio Grande Valley irrigation and municipal water supply on both sides of the border is a decision that will be made by the Texas Commission on Environmental Quality and ConAgua Mexico. More information will be available in updated articles, social media posts, etc. through August.

Quiet Tropics?

Dry air in the main development region between Africa and the Leeward/Windward Islands suggests low activity through mid August; the Gulf is certain to remain quiet underneath the dry, high pressure extension from the west through this period. The true peak of the season begins around August 15th and continues through September 30th; uncertainty in pattern evolution demands that all of the Valley remain prepared; double check your family plan, your home plan, and your recovery plan today to be safe if a tropical cyclone approaches later this summer.



Above: Climate Prediction Center Forecast, August 10-16 2013. Still hot, still dry for most of the Rio Grande Valley. Dashed lines are average weekly temperature (day + night/2, left) and precipitation (in inches, right) for the period.